FORM 124 5-63 USE PREVIOUS EDITIONS

SECURITY CLASSIFICATION

MFG. 1-65

DATE 1440Z 23 JUL 65

SECRET

1	MD	9	
2	"	10	
3	OFA	11	
4	[redacted]	12	
5	CC	13	
6	[redacted]	14	
7	CS	15	
8	[redacted]	16	

IMMEDIATE

TO : DIRECTOR

FROM : [redacted] 25X1A

ACTION:

INFO :

SP-1924 T+P

OSA 1-20

IN 99195

25X1A

TOR 1650Z 23 JUL 65

TO

IMMEDIATE [redacted] INFO [redacted] CITE [redacted] 0666

IDEALIST

25X1A REF: [redacted] 0393 25X1A

1. COMMEND [redacted] ON THOROUGH TEST AND REPORT OF 385 STALL RESULTS.

2. AGREE THAT WING DROP AND YAWING FOR RECOVERY NOT CONSIDERED SAFE FOR USE BY [redacted] 25X1A

3. FYI: WHEN STALL CHECKS CONDUCTED ON 385 AT THE FACTORY WITH SLIPPERS INSTALLED AND NO STALL STRIPS, TENDENCY WAS FOR RIGHT WING DROP (NOT EXCESSIVE) ONLY AT INTERMEDIATE FLAP SETTINGS. THIS IS TO SAY THAT WITHOUT THE USE OF STRIPS, CHARACTERISTICS COULD BE VARIABLE.

4. OUR NO. 1 RECOMMENDATION IS TO RETURN ARTICLE 385 TO THE FACTORY FOR INSTALLATION OF RETRACTABLE STALL STRIPS. IF THIS IS IMPOSSIBLE THEN OUR ONLY RECOURSE IS TO TRY THE STRIPS AND DETERMINE IF THE LOCATION REQUIRED TO PROVIDE ADEQUATE STALL CONTROL CHARACTERISTICS CAN BE TOLERATED FOR HI ALT CRUISE AND TURNS AT

SECRET

GROUP 1 EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION

ALTITUDE.

5. RECOMMEND THE FOLLOWING STEP BY STEP PROCEDURE BE FOLLOWED EXERCISING EXTREME CAUTION, REPEAT - EXTREME CAUTION, NOT ONLY IN LO ALT STALL EVALUATION BUT ESPECIALLY IN HI ALT BUFFET EVALUATION. IN GENERAL, IF A STRIP IS POSITIONED TOO HIGH, TURNS IN THAT DIRECTION WILL BE VIRTUALLY IMPOSSIBLE AND/OR CANNOT BE CONTINUED BECAUSE OF CONTINUOUS BUFFET. IF A STRIP IS ON TOO LOW, IT CAN INCREASE SIGNIFICANTLY THE ELEV TRIM REQUIREMENTS AND THE STICK FORCES FOR HIGH SPEED DESCENT AND IN STEEPER TURNS.

STEP BY STEP PROCEDURE:

6. INSTALL W-196 WING SPOILER STRIPS ON L AND R WING LEADING EDGES WITH A LIBERAL USE OF ARMAMENT TAPE ON A CLEAN SURFACE. STRIP SHOULD BE LOCATED BETWEEN WING STA 226 AND 266. THE CRITICAL PART OF INSTALLATION IS TO LINE UP THE CROWN CENTER LINE OF THE STRIP WITH THE L.E. RADIUS SO AS TO EXTEND IT. THIS CAN BEST BE DONE BY SIGHTING WITH ONE EYE DOWN THE L.E. ALSO, A/C 359 SHOULD HAVE EITHER L OR R STRIP NEARLY "NEUTRAL" OR ON L.E. CENTER LINE AND CAN BE USED AS A GUIDE.

7. MARK STRIP LOCATIONS INSTALLED IN 6 ABOVE.

8. RAISE R.H. STRIP 1/16 IN. BEFORE FIRST FLIGHT. LEAVE L.H. STRIP NEUTRAL.

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9. CONDUCT FIRST STALL CHECK FLIGHT SAME AS PARA 2[redacted]0309.

10. IF STALLS ARE SATISFACTORY. CLIMB TO PLUS 20 ALTITUDE (LT FUEL LOAD FIRST) AND CHECK FOR THE FOLLOWING:

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A. ON CLIMB SPEED - NO BUFFET

B. 1G BUFFET MARGIN - INCREASE SPEED 1 - 2 KNOTS IF POSSIBLE.

C. SLIGHTLY SLOWER SPEED MARGIN - DECREASE SPEED APPROX 3 KNOTS DURING WINGS LEVEL CLIMB IF POSSIBLE, TO CHECK FOR SPOILER STRIP BUFFET EFFECTS.

D. AT SEVERAL CRUISE CLIMB ALTITUDES - MAKE SHALLOW ANGLE TURNS. GRADUALLY INCREASE BANK L TO MAX OF 20 DEGREES IF POSSIBLE.

CAUTION ---------- CAUTION ---------- CAUTION

IT IS VERY DIFFICULT TO DISCERN BETWEEN NORMAL 1G BUFFET, WHICH IS FLOW SEPARATION ON THE WING AND WHICH MANIFESTS ITSELF AS TUCK AND ASSOCIATED HIGH FORCES, AND ROLL-OFF AS THE SPEED INCREASES AND A SPOILED WING FLOW DUE TO THE LOCATION OF HIGH STALL STRIP. THE LATTER CASE COULD CAUSE A SHARP WING DROP AND LOSS OF AIRCRAFT CONTROL DUE TO WING STALL, WHEREAS, IN THE FORMER CASE, POSITIVE A/C CONTROL IS GENERALLY AVAILABLE.

11. IF TESTS AT ALTITUDE ARE SATISFACTORY IN 10 ABOVE, THEN MAKE A FINAL CHECK AT ALTITUDE WITH THE A/C OPERATING UNDER THE MOST ADVERSE LIFT COEFFICIENT AND C.G., THAT IS; FWD CG LIMIT AND 1045 FUEL IN THE MAIN TANKS. REPEAT TESTS IN 10 ABOVE WITH EXTREME CAUTION.

12. IF THE A/C DID NOT STALL SATISFACTORILY IN ITEM 9 ABOVE

(DO NOT TRY TO MAKE IT PERFECT, ONLY ACCEPTABLE, SINCE A HIGH STRIP WILL RAPIDLY AGGRAVATE THE HI ALT SITUATION) DO NOT DO TEST 10 AND 11 FOR THE TIME BEING, BUT RAISE THE R.H. STRIP ANOTHER 1/16 IN. AND REPEAT TEST 9.

13. IF STALL CHARACTERISTICS ARE SATISFACTORY, THEN CONDUCT TESTS IN 10 AND 11 ABOVE WITH CAUTION.

14. IF STALL CHARACTERISTICS ARE STILL NOT SATISFACTORY, CONDUCT TEST IN 10 ABOVE TO SEE IF HEIGHT LIMIT HAS ALREADY BEEN EXCEEDED. IF NOT REACHED, STALL STRIP COULD BE RAISED ONE MORE 1/16 IN. OR TOTAL OF 3/16 IN. DO NOT EXCEED THIS DIMENSION. THIS IS DEFINITELY GETTING CLOSE TO PROBLEM AREAS IF NOT ALREADY THERE.

15. IF TESTS ALL SATISFACTORY, CEMENT STRIPS IN FINAL LOCATION WITH QUICK REPAIR SEALING COMPOUND, PR-5401-K, LAC40-766, TYPE III. IN ORDER TO KEEP EXACT POSITION OF STRIP, OUR PROCEDURE IS TO DRILL A SMALL HOLE AT EACH END AND USING CAULKING GUN, SQUIRT THE CEMENT IN WITHOUT REMOVING THE ARMAMENT TAPE.

16. IT GOES WITHOUT SAYING THAT 25X1A [redacted] SHOULD CONDUCT ENTIRE EVALUATION.

25X1A 17. [redacted] ALSO WISHES TO STATE THAT THIS IS DEFINITELY OUT OF THE REALM OF A FIELD FIX AND ON THE J75 INSTALLATION (HIGH LIFT COEFFICIENTS ASSOCIATED WITH HIGH MACH NO.) SHOULD BE DONE AT THE FACTORY OR UNDER CLOSE SUPERVISION BY ENGINEERING FLIGHT TEST PERSONNEL.

25X1A

THE PROBLEM ON ARTICLE 385 AND THE ABOVE INSTRUCTIONS WERE COMPLETELY DISCUSSED WITH KELLY JOHNSON THIS A.M. HE STRONGLY ENDORSES INSTALLATION OF THE RETRACTABLE STALL STRIPS AS NO. 1 RECOMMENDATION TO CORRECT THIS PROBLEM. IF IT IS NOT FEASIBLE TO RETURN ARTICLE 385 TO THE FACTORY AT THIS TIME, THEN HE WILL SEND

25X1A [redacted] FOR THE INSTALLATION AND TEST OF FIXED STALL STRIPS.

IT SHOULD BE POINTED OUT THAT IT IS ENTIRELY POSSIBLE THAT THE INSTALLATION OF THE FIXED STALL STRIPS WILL CORRECT THE STALL CHARACTERISTICS BUT MAY BE TOTALLY UNACCEPTABLE AT HIGH ALTITUDES.

PLEASE MAKE ARRANGEMENTS FOR TRANSPORTATION TO AND FROM [redacted]

25X1A

FOR [redacted]. PASSPORTS AND SHOTS ARE UP-TO-DATE. 25X1A

END OF MESSAGE